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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/796,300      | 03/10/2004  | Masanori Sato        | 044499-0204         | 9116             |

22428 7590 09/19/2007  
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| EXAMINER |
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ANYIKIRE, CHIKAODILI E

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| ART UNIT | PAPER NUMBER |
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2621

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| MAIL DATE | DELIVERY MODE |
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09/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                    |                             |  |
|------------------------------|------------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/796,300      | Applicant(s)<br>SATO ET AL. |  |
|                              | Examiner<br>Chikaodili E. Anyikire | Art Unit<br>2621            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-15 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20040715</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This application is responsive to application number (10796300) filed on March 10, 2004. Claims 1-15 are pending and have been examined.

#### ***Information Disclosure Statement***

2. Acknowledgement is made of applicant's information disclosure statement.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lehner et al (US 2001/0041077).

As per claim 1, Lehner et al disclose an intruding object monitoring system comprising:

a camera (Fig 2, 5) mounted on a position so as to look down a monitoring target region (Fig 3, 6) including a dangerous source (Fig 2, 1 and 2; [0039]-[0041]); and

an information processing apparatus (evaluation unit) performing information processes for monitoring an intruding object based on a monitoring target region image taken by the camera ([0043] and [0044]),

wherein a mounting position of the camera is determined so that the dangerous source is shown at a peripheral part of a viewing field of the camera ([0041] and [0044]).

As per claim 2, Lehner et al disclose an intruding object monitoring system comprising:

a camera (Fig 2, 5) mounted on a position so as to look down a monitoring target region (Fig 3, 6) including a dangerous source ([0039]-[0041]); and

an information processing apparatus (evaluation unit) performing information processes for monitoring an intruding object based on a monitoring target region image taken by the camera ([0043] and [0044]),

wherein the dangerous source can be set only at a peripheral part of a viewing field of the camera ([0041] and [0044]).

As per claim 3, Lehner et al disclose the intruding object monitoring system according to claim 1, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for determining that a mobile object intrudes into a warning region (Fig 3, 7) set in the vicinity of the dangerous source, by comparing a mobile object position in the monitoring target region image to a warning region position (Fig 3, 7) in the monitoring target region (Fig 3, 6) image on an image ([0051]-[0054] and [0081]).

Regarding claim 11, arguments analogous to those presented for claim 3 are applicable to claim 11.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 4-6, 9, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Braune (US 2003/0076224).

As per claim 4, Lehner et al disclose the intruding object monitoring system according to claim 1, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for immediately generating a warning in a case where a mobile object intrudes into a warning region (Fig 3, 8) existing in the vicinity of the dangerous source ([0044] and [0051]-[0054]).

However, Lehner does not explicitly teach for generating a warning only when speed of the mobile object toward the dangerous source exceeds a predetermined value in a case where the mobile object intrudes into the warning target region existing in the vicinity of the warning region.

In the same field of endeavor, Braune teaches for generating a warning only when speed of the mobile object toward the dangerous source exceeds a

predetermined value in a case where the mobile object intrudes into the warning target region existing in the vicinity of the warning region ([0026] and [0036]).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the invention of Lehner et al with the invention of Braune. The advantage is the invention of Braune provides a means by which the safety of a machine operator continues to be ensured.

Regarding claim 5, arguments analogous to those presented for claim 4 are applicable to claim 5.

As per claim 6, Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information process for monitoring the intruding object performed in the information processing apparatus comprises a process for continuously generating the warning until the mobile object which intruded into the warning region (Fig 3, 8) existing in the vicinity of the dangerous source moves out of the warning region (Fig 3, 8), while for holding up the warning when at least one part of the mobile object is lost in sight in the warning region (Lehner, Fig 3, 8; [0052] and [0053]).

As per claim 9, Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for monitoring only the mobile objects existing in the warning region when the total number of the mobile objects existing in the warning region and the number of the mobile

objects existing in the warning target region is more than a predetermined value ([0050]-[0053]).

Regarding claim 12, arguments analogous to those presented for claim 6 are applicable to claim 12.

Regarding claim 14, arguments analogous to those presented for claim 9 are applicable to claim 14.

8. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Braune (US 2003/0076224) in further view of Cofer et al (US 7,200,246).

As per claim 7, the modified invention of Lehner et al disclose the intruding object monitoring system according to claim 6, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for allowing a reset of the warning which was held up when at least one part of the mobile object is lost in sight in the warning region (Braune, [0018] Ln 12-17).

However, the modified invention of Lehner et al does not explicitly teach only by a manual resetting operation.

In the same field of endeavor, Cofer et al teach only by a manual resetting operation (Fig 14, 564; Col 11 Ln 48-59).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the modified invention of Lehner et al with the invention of Cofer et al. This is a well-known configuration in the relevant art for providing the capability of manual resetting of the system.

9. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Braune (US 2003/0076224) in further view of Puchek et al (US 6,504,470).

As per claim 8, the modified invention of Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for immediately generating the warning and then holding up the warning (Lehner, Fig 3, 8; [0052] and [0053]).

However, the modified invention of Lehner et al does not explicitly teach when the mobile objects whose number is more than a predetermined value intrude into the monitoring target region.

In the same field of endeavor, Puchek et al teach when the mobile objects whose number is more than a predetermined value intrude into the monitoring target region (Col 8 Ln 33-56).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the modified invention of Lehner et al with the



invention of Puchek et al. It is well known in the art to keep track of moving objects in a detection system to prevent the access by unauthorized personnel.

Regarding claim 13, arguments analogous to those presented for claim 8 are applicable to claim 13.

10. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Braune (US 2003/0076224) in further view of Nichani et al (US 6,504,470).

As per claim 10, the modified of invention of Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information processes for monitoring the intruding object performed in the information processing apparatus.

However, the modified of invention of Lehner et al does not explicitly teach a process for monitoring only the mobile objects whose number is a predetermined value and which are selected in increasing order of a distance from the dangerous source when the mobile objects whose number is more than the predetermined value intrude into the monitoring target region.

In the same field of endeavor, a process for monitoring only the mobile objects whose number is a predetermined value and which are selected in increasing order of a distance from the dangerous source when the mobile objects whose number is more than the predetermined value intrude into the monitoring target region (Fig 10, Col 22 – Col 23 Ln 30).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the modified invention of Lehner et al with the invention of Nichani et al. It is well known in the art to compute distances to alert operators are within a danger zone.

Regarding claim 15, arguments analogous to those presented for claim 10 are applicable to claim 15.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272 - 7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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